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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,831	09/19/2003	Gregory J. May	200300696-1	6035
22879	7590	01/28/2008		
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER MOON, SEOKYUN	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 01/28/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
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Office Action Summary	Application No.	Applicant(s)	
	10/665,831	MAY, GREGORY J.	
	Examiner	Art Unit	
	Seokyun Moon	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-36 is/are allowed.
- 6) ☒ Claim(s) 1-24 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Amendment

1. Claims 1, 2, 3, 5, 7, 16, 20, 24, 25, 31-37 have been amended to overcome the rejections made under 35 U.S.C. 112 second paragraph.

Accordingly, the rejections have been withdrawn.

Response to Arguments

2. The Applicant's arguments regarding the rejections under 35 U.S.C. 112 first paragraph have been fully considered.

The Applicant [Applicant's Remark: pg 11 lines 8-11] argued, "*Thus, it is not that the pixel is activated when emissions having plural polarizations is received, but rather that a corresponding color channel of the pixel is activated when an emission having a corresponding polarization state is received*".

Examiner respectfully disagrees.

As best understood by the Examiner, in the instant invention, when emissions having a polarization corresponding to a color channel is received by a receptor included in a pixel, **a light emitting diode** corresponding to the color channel, which is included in the pixel, **is activated** based on the received polarization. Since a color channel cannot be a subject which can be activated and cannot be interpreted as a light emitting diode, the specification does not support the claim limitation, "*said plurality of receptors activating a corresponding color channel of said pixels*" [claim 1 lines 12-13]. In other words, a color channel is not a subject to be activated, but is a characteristic of a light emitting diode included in a pixel. Accordingly, the Examiner respectfully submits that the Applicant's arguments are not persuasive.

3. The Applicant's arguments regarding the rejections under 35 U.S.C. 102(b) have been fully considered and are persuasive.

Accordingly, the rejections of claims 25-30, 34, 36, and 37 have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sahouani (US 2003/0184862), for claim 37.

Specification

4. Specification is objected to because of the following matters: emissions of polarization [pg 14 lines 20-21].

As discussed in the previous Office Action, "*polarization*" is not a subject being emitted, but is a characteristic of emission.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-24** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to **claim 1**,

The claim discloses, "*a data encoder to apply data for each of the color channels to corresponding ones of the plural polarizations; and*" [claim 1 lines 6-7].

However, the Examiner respectfully submits that the plural polarizations are characteristics of emissions, but cannot be subjects to which data are applied.

For further examination purpose, the claim limitation will be interpreted as, “*a data encoder to apply data for each of the color channels to the emissions having corresponding ones of the plural polarizations; and*”.

The claim discloses, “*said plurality of receptors activating a corresponding color channel of said pixels*” [claim 1 lines 12-13].

However, the Examiner respectfully submits that the color channel is a characteristic of pixels, but cannot be a subject to be activated by the receptors.

For further examination purpose, the claim limitation will be interpreted as, “*said plurality of receptors activating said pixels to emit a corresponding a color channel*”.

As to **claims 2-24**, the claims are rejected as being dependent upon a base claim rejected under 35 U.S.C. 112, second paragraph.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claims 1-24** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to **claim 1**, the claim discloses, “*said plurality of receptors activating a corresponding color channel of said pixels depending upon which, if any, of the emissions having a corresponding polarization state is received*”.

However, as best understood by the Examiner, in the instant invention, the activation by the plurality receptors is processed **only** when emissions having a corresponding polarization state

corresponding to **the color channel** is received, while the claim discloses the activation by the plurality of receptors is processed when **any** of the emissions having a corresponding polarization state is received.

As best understood by the Examiner, the claim limitation will be interpreted as, "*said plurality of receptors activating a corresponding color channel of said pixels depending upon which, if any, of the emissions having a corresponding polarization state for the corresponding color channel is received*".

As to **claims 2-24**, the claims are rejected as being dependent upon a base claim rejected under 35 U.S.C. 112, first paragraph.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claim 37** is rejected under 35 U.S.C. 102(e) as being anticipated by Sahouani (US 2003/0184862).

Sahouani teaches an optically addressable display ("*color liquid crystal display 600*") [fig. 6 and par. (0065) lines 1-2] comprising:

at each pixel,

means ("*bottom alignment layer 610*") [fig. 6] for receiving emissions having a plurality of polarizations, each of the plurality of polarizations corresponding to a separate color data channel [par. (0066) lines 13-19] wherein data is encoded onto each of the separate color data channels (data is encoded

onto each of the separate color data channels by controlling "*liquid crystal layer 608*" included in the pixels corresponding to the separate color data channels), and

means (a combination of transistors or switching elements and "*liquid crystal layer 608*" of each pixel included in the "*liquid crystal display 600*") for actively producing plural color displays, one for each of the plurality of polarizations of received emissions (one for each of the pixels having different colors).

Allowable Subject Matter

11. **Claims 25-36** are allowed.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Allen (US 7,277,090 and US 6,680,579), May (US 2005/0122291), and Anderson (US 7,061,480) teach a display configured to display images, comprising a plurality of pixels wherein each of the plurality of the pixels includes a light receiver and a light emitting diode which emits light corresponding to the light received by the light receiver.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

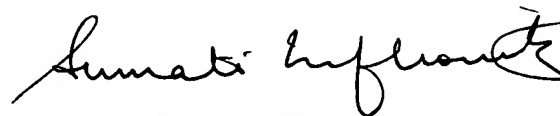
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 18, 2007

- s.m.



SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER